

10/27/78



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PAPER NO. 2 *myl*

R. Covington Art Unit 116

[ 923,602 7/11/78  
Keith Chadwick Murdock et al ]

**MAILED**

MAILED:

NOV 9 1978

**GROUP 110**

Edward A. Conroy Jr.  
1937 West Main St.  
Stamford, Conn. 06904

THIS IS A COMMUNICATION FROM THE EXAMINER  
IN CHARGE OF YOUR APPLICATION.

COMMISSIONER OF  
PATENTS AND TRADEMARKS

☒ This application has been examined.

☐ Responsive to communication filed on \_\_\_\_\_.

☐ This action is made final.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE \_\_\_\_\_ MONTH(S)  
30 DAYS FROM THE DATE OF THIS LETTER.

FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED.  
35 U.S.C. 133

**PART I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited, Form PTO-892.           | 2. <input type="checkbox"/> Notice of Informal patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Informal patent Application, Form PTO-152 | 4. <input type="checkbox"/>   |

**PART II SUMMARY OF ACTION**

1. ☒ Claims 1-56 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2. ☐ Claims \_\_\_\_\_ have been cancelled.

3. ☐ Claims \_\_\_\_\_ are allowed.

4. ☐ Claims \_\_\_\_\_ are rejected.

5. ☐ Claims \_\_\_\_\_ are objected to.

6. ☒ Claims 1-50 are subject to restriction or election requirement.

7. ☐ The formal drawings filed on \_\_\_\_\_ are acceptable.

8. ☐ The drawing correction request filed on \_\_\_\_\_ has been ☐ approved.  
☐ disapproved.

9. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has  
☐ been received. ☐ been filed in parent application;  
☐ not been received. ☐ serial no. \_\_\_\_\_ filed on \_\_\_\_\_.

10. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

11. ☐ Other

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Pursuant to the Commissioner's Notice 922 O.G. 1016, issue of May 28, 1974, Claims 34,42, and 45 are rejected under 35 USC 112, paragraph 2 on the ground of misjoinder and that the claims recite an improper Markush group of multiple independent and patentably distinct inventions.

A Markush type claim is directed to independent and distinct inventions if two or more of its members are so unrelated and diverse that a prior art reference anticipating the claims under 35 USC 102 with respect to one of its members would not render the claim obvious under 35 USC 103 with respect to the other members.

The independent and distinct species within the scope of the claims 34, 42, and 45 are:

(A) Where NR1 R2 is not heterocyclic classification is in class 260, subclass 380.

(B) Where NR1 R2 taken together are morpholine, classification is in Class 554, subclass 79.

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(C) Where NR1 R2 taken together are thiomorpholina classification is in Class 544, subclass 58.

(D) Where NR1 R2 taken together are piperazino' classification is in Class 260 subclass 268 TR.

(E) Where N(CH<sub>2</sub>)<sub>m</sub> m=2, classification is in Class 260, subclass 239E.

(F) Where N(CH<sub>2</sub>)<sub>m</sub> m=3 classification is in Class 260, subclass 239A.

(G) Where N(CH<sub>2</sub>)<sub>m</sub> m=4, classification is in Class 260, subclass 326.5C.

(H) Where N(CH<sub>2</sub>)<sub>m</sub> m=5, classification is in class 260, subclass 272.

(I) Where N(CH)<sub>m</sub> m=6, classification is in Class 260, subclass 239B.

The above inventions are regarded as independent because they are unconnected in operation, and one does not require the other for ultimate use.

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No dependent relationship among these has been disclosed in the specification or otherwise shown to exist. The ✓ inventions are chemically distinct one from the other and fall into separate are recognized distinct areas of classification as above indicated.

Applicants should submit a claim limited to the elected invention or species thereof or elect one of the species of claims 1-33,35,41,43,44,46,50. Otherwise no further examination is required unless the rejection of the Markush-type claim as above stated is overcome.

*R*

RCovington/fma

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*Alle B. Burt*

EX-100

(17)

PART III

SERIAL  
NUMBER

973602

GROUP ART UNIT

117

## NOTIFICATION OF REJECTION(S) AND/OR OBJECTION(S) (35 USC 132)

	CLAIMS	REASONS FOR REJECTION	REFERENCES *	INFORMATION IDENTIFICATION AND COMMENTS
	(1)	(2)	(3)	(4)
1	1	35 USC 102	A	Ref. A anticipates the quaternary ammonium salts a species of applicant's invention, see formula in col. 2 lines 20 and col. 3 lines 30 which show quaternization of tertiary amine.
2				
3				
4				

rejection and

5	Claim 21 is allowed and 35 USC 112 Restriction requirement with- drawn in accordance with 976 O.G. 128 "Revised Practice re Markush-Type Claims". As no prior art was found that anticipates or renders obvious the elected species, the search was extended to a non-elected species, the claim from which the elected species depends, this claim being rejectable on prior art the other non-elected species are held with drawn from further consideration.			
	Ref. R is shown as other art of interest.			

\* Capital letters representing references are identified on accompanying Form PTO 46-42. (Formerly PTO-892)  
The symbol "v" between letters represents - in view of -.  
The symbol "&" or "&" between letters represents - and -.  
A slash "/" between letters represents the alternative - or -.

NOTE: Sections 100, 101, 102, 103, and 112 of the Patent Statute  
(Title 35 of the United States Code) are reproduced on the  
back of this sheet.

EXAMINER

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3591

Thomas A. Waltz  
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PATENT EXAMINER  
GROUP ART UNIT 117

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**35 U.S.C. 100. Definitions.** When used in this title unless the context otherwise indicates —

- (a) The term "invention" means invention or discovery.
- (b) The term "process" means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.
- (c) The terms "United States" and "this country" mean the United States of America, its territories and possessions.
- (d) The word "patentee" includes not only the patentee to whom the patent was issued but also the successors in title to the patentee.

**35 U.S.C. 101. Inventions patentable.** Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**35 U.S.C. 102. Conditions for patentability; novelty and loss of right to patent.** A person shall be entitled to a patent unless —

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or
- (c) he has abandoned the invention, or
- (d) the invention was first patented or cause to be patented by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application filed more than twelve months before the filing of the application in the United States, or
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or
- (f) he did not himself invent the subject matter sought to be patented, or
- (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

**35 U.S.C. 103. Conditions for patentability; non-obvious subject matter.** A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**35 U.S.C. 112. Specification.** The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention. A claim may be written in independent or dependent form, and if in dependent form, it shall be construed to include all the limitations of the claim incorporated by reference into the dependent claim.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.